TITLE OF THE INVENTION

LASER POUCH FORM AND METHOD OF CONSTRUCTION

CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] (NOT APPLICABLE)

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] (NOT APPLICABLE)

BACKGROUND OF THE INVENTION

[0003] The present invention relates generally to business forms and, more particularly, to a business form including an integrated pouch that is suitable for laser printing.

[0004] Currently, in order to identify the contents of an envelope, a user may physically write on the outside of the envelope or print a sheet of labels to be affixed either to the envelope itself and/or its contents. In a business form context, this application thus requires two forms, an envelope form and a label sheet. Combined forms including an envelope and at least one label-type product have been attempted, but due to their construction, are undesirably unsuited for laser printing. Additionally, existing forms use a paper or like web to form the envelope, and thus when the envelope is sealed, the user is unable to see the contents of the envelope without opening it.

BRIEF SUMMARY OF THE INVENTION

[0005] The combination form of the present invention eliminates the need to utilize separate applications currently used for identifying or labeling the contents of an

envelope. The form also utilizes a transparent web of material to define a pouch or envelope where its contents can be viewed without requiring the envelope to be opened. Additionally, the form is preferably of a construction that is suitable for laser printing. Another feature of the invention resides in a partial application of release material to a bottom liner such that portions of the top web are permanently affixed to the liner while other portions are removable. With this construction, labels can be die cut from the primary web of material, which after printing via a laser printer or the like can be affixed to the contents of the envelope and/or the envelope exterior.

[0006] In an exemplary embodiment of the invention, a pouch form suitable for laser printing includes a first web of material having a top printable sheet with an adhesive bottom layer, and a bottom liner secured to the top printable sheet via the adhesive bottom layer. A second web of transparent material having three sides thereof is fixed to the bottom liner via adhesive strips to define a transparent pouch. The first and second webs, when assembled, are sized such that the pouch form is suitable for laser printing. In one embodiment, the pouch form may further include at least one label die cut from the top printable sheet. In this context, the bottom liner is preferably at least partially coated with a release material.

[0007] The bottom liner generally may be selectively partially coated with a release material to define at least one label area in the top printable sheet. An open side of the second web of material may be disposed spaced from an uppermost portion of the first web of material to define a sealing flap, wherein the bottom liner is coated with a release material at least adjacent the sealing flap, and wherein the bottom liner is die cut adjacent the open side of the second web of material. Indicia may be printed on at least portions of the top printable sheet. Preferably, the transparent pouch is sealable using the first web of material.

[0008] In another exemplary embodiment of the invention, a method of constructing a pouch form suitable for laser printing includes the steps of providing a first web of material including a top printable sheet with an adhesive bottom layer; securing a bottom liner to the top printable sheet via the adhesive bottom layer, the first web of

material and the bottom liner having a perimeter with four sides; applying adhesive strips on the bottom liner substantially along three sides of the four sided perimeter; and fixing a second web of transparent material to the bottom liner via the adhesive strips to define a transparent pouch, wherein the first and second webs, when assembled, are sized such that the pouch form is suitable for laser printing.

[0009] In still another exemplary embodiment of the invention, a pouch form suitable for laser printing includes a first web of material having a top printable sheet with an adhesive coated bottom layer, and a bottom liner secured to the top printable sheet via the adhesive bottom layer. A second web of transparent material having three sides thereof is fixed to the bottom liner via adhesive strips to define a transparent pouch. Selected portions of the bottom liner are coated with a release material so as to be removably secured to the first web of material, and remaining portions of the bottom liner are permanently affixed to the first web of material.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] These and other aspects and advantages of the present invention will be described in detail with reference to the accompanying drawings, in which:

[0011] FIGURE 1 illustrates an exemplary top material layout for the pouch form of the present invention;

[0012] FIGURE 2 is a bottom view of the exemplary form;

[0013] FIGURE 3 illustrates a cross section of the form; and

[0014] FIGURE 4 illustrates a top sheet liner including a selected application of release material.

DETAILED DESCRIPTION OF THE INVENTION

[0015] With reference to FIGS. 1-3, the pouch form 10 of the present invention is generally constructed of a first web of material 12 including a top printable sheet 14 with an adhesive bottom layer 16 and a bottom liner 18 secured to the top printable sheet 14

via the adhesive bottom layer 16. The top printable sheet 14 is preferably a pressure sensitive material made to receive laser, ink jet or other type of print media. The material may be formed of synthetic or paper according to end user preference.

[0016] A second web 20 of preferably transparent material has three sides thereof fixed to the bottom liner 18 via adhesive strips 22 to define a transparent pouch 24. That is, the bottom liner 18 having a perimeter with four sides has adhesive strips 22 applied thereon substantially along three sides of the four-sided perimeter as shown in FIG. 2. When the second web 20 is affixed to the bottom liner 18, the pouch 24 is defined by the three fixed edges and the open (non-adhered) fourth edge.

[0017] When assembled, the first 12 and second 20 webs have a total combined thickness of about 5-7 mils such that the form 10 is suitable for laser printing. Of course, as noted, the form can also be printed via ink jet, impact or other type of print media.

[0018] With reference to FIG. 4, the bottom liner 18 may be selectively partially coated with a release material 26 to define one or more label areas 28 in the top printable sheet 14. Areas 30 on the bottom liner 18 without the release material 26 serve as non-removable or permanently welded sections 32 of the top printable sheet 14. One or more labels 34 are preferably die cut from the top printable sheet 14 adjacent the label areas 28 defined by the release material coated portions 26 of the bottom liner 18. In this manner, indicia 35 can be suitably printed on the pouch form 10 via a laser printer or the like on the top printable sheet 14 including the permanently welded areas 32 and labels 34, etc., and the labels 34 can be removed to be adhered to an item being inserted into the form pouch 24 or somewhere else on the form itself, thereby combining what was previously accomplished using two products, i.e., an envelope form and a sheet of labels, into a single product.

[0019] With reference to FIG. 2, an open side 36 of the second web of material 20 is preferably disposed spaced from an uppermost portion 38 of the first web of material 12 to define a sealing flap 40. In this context, the bottom liner 18 is coated with release material 26 at least adjacent the sealing flap 40 (as shown in the top portion of FIG. 4), and the bottom liner 18 may be die cut at 42 adjacent the open side 36 of the second web

of material 20. In this context, in order to seal the form pouch 24, a portion of the bottom liner 18 can be removed along the cut line 42 by virtue of the release material 26, and the sealing flap 40 can be folded down over the second web of material 20 and sealed via the exposed adhesive 16.

[0020] In constructing the pouch form, the first web of material 12 may be a stock material including the top printable sheet 14, adhesive bottom layer and bottom liner 18. The bottom liner 18 may be processed to include release material 26 prior to mating with the top printable sheet 14. The adhesive strips 22 are applied on the bottom liner 18 substantially along three sides of the four-sided perimeter as shown in FIG. 2. The adhesive may be applied using any suitable known process via an aqueous adhesive or hot melt adhesive or the like. The adhesive is preferably a permanent type of adhesive and is manufactured so it has the ability to adhere to plastic or paper fiber with maximum binding strength. The adhesive should be strong to be able to lock in the pouch to the base material. The adhesive is preferably applied all at one time and can be applied by flexo print, hot melt applicator, screen, or slot coater. Pre-patterned adhesives can be used if a pattern is fashioned for this application.

[0021] Subsequently, the second web of transparent material 20 is fixed to the bottom liner 18 via the adhesive strips 22 to define the transparent pouch 24. After a printing process, one or more of the labels 34 are die cut from the top printable sheet 14. Variable printing may subsequently be performed prior to product use if necessary or desirable.

[0022] The form 10 may be any size, but preferably will be constructed using standard 8 ½ x 11 or 8 ½ x 14 inch dimensions. The form can be manufactured in sheet form, fan-fold, roll or continuous (marginal hole-punched). The face portion of the form may have labels in the face as shown in the drawings. These decals can be placed onto the surface by normal coating, spot coating, strip coating, pattern coating or silicone coating. Decals can be placed on to the sheet by integration of the decal or the application of a label onto the face. The base material can be made as a total label construction or can be made by strip coating the liner (a portion with silicone and a

portion without silicone). By doing this, a portion of the face material will be pressure sensitive and a portion will be "welded" material not capable of being or having labels.

[0023] The form 10 can be used as a pouch with printing on its face, or can be used for labels on the face or both. By enabling the form to be printed via a laser printer or the like, high-speed processing of the pouch form can be effected. Exemplary applications for the form of the present invention include controlled drugs, security items, evidence or other secured and controlled items.

[0024] While the invention has been described in connection with what is presently considered to be the most practical and preferred embodiments, it is to be understood that the invention is not to be limited to the disclosed embodiments, but on the contrary, is intended to cover various modifications and equivalent arrangements included within the spirit and scope of the appended claims.